AMENDMENTS TO THE CLAIMS

Please cancel original claims 1-4 and substitute new claims 5-11.

1-4. (canceled)

5. (new) A multi-stage distillation apparatus includes a plurality of evaporators connected in series for staged operation in a rising film evaporation process wherein the evaporators are disposed in a compact concentric arrangement, the apparatus comprising:

a ring (annular) shell and tube first evaporator including a first annular vertical tube bundle, supported and sealed by a first upper tubesheet and a first bottom tubesheet, an external wall and an internal wall enclosing the first tube bundle, said internal wall having an upward extension over the upper tubesheet and the external wall having a downward extension adjacent the bottom tubesheet and fastened to a base, and having a first vapour chamber above the upper tubesheet and a feed chamber below the bottom tubesheet; and

a second evaporator including a second cylindrical vertical tube bundle, supported and sealed by a second upper tubesheet and a second bottom tubesheet, the second upper tubesheet having a diameter at least 30% larger than the second bottom tubesheet, and having a first floating head on the second bottom tubesheet and a central tube connecting with the floating head for directing condensate thereto, and a first external armour shell surrounding the cylindrical bundle and engaging the inner wall of the shell and tube evaporator to direct vapour to pass through the second cylindrical tube bundle.

6. (new) An apparatus as in claim 5 and further including:

a third evaporator having a third intermediate vertical ring tube bundle, supported and sealed by a third upper tubesheet and a third bottom tubesheet, a second

internal wall welded to the third upper tubesheet, said second internal wall having an upward extension over the third upper tubesheet, and having a second floating head on the third bottom tubesheet and a second vapour chamber above the third upper tubesheet; said third intermediate vertical ring tube bundle being disposed concentrically between the first annular vertical tube bundle of the shell and tube first evaporator and the second cylindrical vertical tube bundle of the second evaporator.

7. (new) An apparatus as in claim 6 and further including:

a fourth evaporator having a fourth intermediate vertical ring tube bundle supported and sealed by a fourth upper tubesheet and a fourth bottom tubesheet, a third internal wall welded to the fourth upper tubesheet, said third internal wall having an upward extension over the fourth upper tubesheet, and having a third floating head on the fourth bottom tubesheet and a third vapour chamber above the fourth upper tubesheet; said fourth intermediate vertical ring tube bundle being disposed concentrically between said third intermediate vertical ring tube bundle and one of the first annular vertical ring tube bundle of the shell and tube first evaporator and the second cylindrical vertical tube bundle of the second evaporator.

8. (new) An apparatus as in claim 5 wherein the external wall is fastened to the base by bolting or welding.

9. (new) An apparatus as in claim 5 wherein the first vapour chamber is laterally limited by a cylindrical shell and on top by a flange, the feed chamber is laterally limited by the downward extension of the external wall, and at the bottom by the base, and on top by a plate, wherein the upper tubesheet has a diameter larger than the diameter of the external wall and the upper tubesheet includes an opening for passage of a brine line.

10. (new) An apparatus as in claim 6 wherein said second vapour chamber is laterally limited by a second cylindrical shell and on top by a connection flange and an external armour shell is disposed surrounding the third ring tube bundle.

11. (new) An apparatus as in claim 7 wherein said base contains a cylindrical welded support and welded tubes; said third vapour chamber is laterally limited by a third cylindrical shell and said feed chamber is limited on bottom by the base and laterally by extensions of inner and exterior walls.

12. (new) An apparatus for seawater or brackish water desalination as in claim 5.

13. (new) An apparatus as in claim 12 wherein is provided an upper vessel closed on the top and containing a condenser for obtaining distilled water from the final condenser stage of the apparatus.

14. (new) An apparatus as in claim 13 including means for cooling the condenser with cold salt water and to drive an eductor for obtaining vacuum in the condensers.

15. (new) An apparatus as in claim 13 including means for heating hot water as an energy source for the first evaporator of the apparatus.

16. (new) An apparatus as in claim 13 including means for pumping fresh water from the apparatus to storage.